



FX™ Mixer Series

16, 24 and 32 Channel • Four-Bus Mixing Consoles

Operating
Manual





Intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



Intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: Risk of electrical shock — DO NOT OPEN!

CAUTION: To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To prevent electrical shock or fire hazard, this apparatus should not be exposed to rain or moisture, and objects filled with liquids, such as vases, should not be placed on this apparatus. Before using this apparatus, read the operating guide for further warnings.



Este símbolo tiene el propósito, de alertar al usuario de la presencia de “(voltaje) peligroso” sin aislamiento dentro de la caja del producto y que puede tener una magnitud suficiente como para constituir riesgo de descarga eléctrica.



Este símbolo tiene el propósito de alertar al usuario de la presencia de instrucciones importantes sobre la operación y mantenimiento en la información que viene con el producto.

PRECAUCION: Riesgo de descarga eléctrica ¡NO ABRIR!

PRECAUCION: Para disminuir el riesgo de descarga eléctrica, no abra la cubierta. No hay piezas útiles dentro. Deje todo mantenimiento en manos del personal técnico cualificado.

ADVERTENCIA: Para prevenir choque eléctrico o riesgo de incendios, este aparato no se debe exponer a la lluvia o a la humedad. Los objetos llenos de líquidos, como los floreros, no se deben colocar encima de este aparato. Antes de usar este aparato, lea la guía de funcionamiento para otras advertencias.



Ce symbole est utilisé dans ce manuel pour indiquer à l'utilisateur la présence d'une tension dangereuse pouvant être d'amplitude suffisante pour constituer un risque de choc électrique.



Ce symbole est utilisé dans ce manuel pour indiquer à l'utilisateur qu'il ou qu'elle trouvera d'importantes instructions concernant l'utilisation et l'entretien de l'appareil dans le paragraphe signalé.

ATTENTION: Risques de choc électrique — NE PAS OUVRIR!

ATTENTION: Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve à l'intérieur aucune pièce pouvant être réparée par l'utilisateur. Confiez l'entretien et la réparation de l'appareil à un réparateur Peavey agréé.

AVIS: Dans le but de réduire les risques d'incendie ou de décharge électrique, cet appareil ne doit pas être exposé à la pluie ou à l'humidité et aucun objet rempli de liquide, tel qu'un vase, ne doit être posé sur celui-ci. Avant d'utiliser de cet appareil, lisez attentivement le guide fonctionnant pour avertissements supplémentaires.



Dieses Symbol soll den Anwender vor unisolierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von Ausreichender Stärke sind, um einen elektrischen Schlag verursachen zu können.



Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.

VORSICHT: Risiko — Elektrischer Schlag! Nicht öffnen!


VORSICHT: Um das Risiko eines elektrischen Schlages zu vermeiden, nicht die Abdeckung entfernen. Es befinden sich keine Teile darin, die vom Anwender repariert werden könnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen.

WARNUNG: Um elektrischen Schlag oder Brandgefahr zu verhindern, sollte dieser Apparat nicht Regen oder Feuchtigkeit ausgesetzt werden und Gegenstände mit Flüssigkeiten gefüllt, wie Vasen, nicht auf diesen Apparat gesetzt werden. Bevor dieser Apparat verwendet wird, lesen Sie bitte den Funktionsführer für weitere Warnungen.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: When using electrical products, basic cautions should always be followed, including the following:



1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding plug. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point they exit from the apparatus.
11. Only use attachments/accessories provided by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13.  Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Never break off the ground pin. Write for our free booklet "Shock Hazard and Grounding." Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
16. If this product is to be mounted in an equipment rack, rear support should be provided.
17. Note for UK only: If the colors of the wires in the mains lead of this unit do not correspond with the terminals in your plug, proceed as follows:
 - a) The wire that is colored green and yellow must be connected to the terminal that is marked by the letter E, the earth symbol, colored green or colored green and yellow.
 - b) The wire that is colored blue must be connected to the terminal that is marked with the letter N or the color black.
 - c) The wire that is colored brown must be connected to the terminal that is marked with the letter L or the color red.
18. This electrical apparatus should not be exposed to dripping or splashing and care should be taken not to place objects containing liquids, such as vases, upon the apparatus.
19. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures:

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115


According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Earplugs or protectors to the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss, if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

SAVE THESE INSTRUCTIONS!

WICHTIGE SICHERHEITSHINWEISE



ACHTUNG: Beim Einsatz von Elektrogeräten müssen u.a. grundlegende Vorsichtsmaßnahmen befolgt werden:

1. Lesen Sie sich diese Anweisungen durch.
2. Bewahren Sie diese Anweisungen auf.
3. Beachten Sie alle Warnungen.
4. Befolgen Sie alle Anweisungen.
5. Setzen Sie dieses Gerät nicht in der Nähe von Wasser ein.
6. Reinigen Sie es nur mit einem trockenen Tuch.
7. Blockieren Sie keine der Lüftungsöffnungen. Führen Sie die Installation gemäß den Anweisungen des Herstellers durch.
8. Installieren Sie das Gerät nicht neben Wärmequellen wie Heizungen, Heizgeräten, Öfen oder anderen Geräten (auch Verstärkern), die Wärme erzeugen.
9. Beeinträchtigen Sie nicht die Sicherheitswirkung des gepolten Steckers bzw. des Erdungssteckers. Ein gepolter Stecker weist zwei Stifte auf, von denen einer breiter ist als der andere. Ein Erdungsstecker weist zwei Stifte und einen dritten Erdungsstift auf. Der breite Stift bzw. der dritte Stift dient Ihrer Sicherheit. Sollte der beiliegende Stecker nicht in Ihre Steckdose passen, wenden Sie sich bitte an einen Elektriker, um die ungeeignete Steckdose austauschen zu lassen.
10. Schützen Sie das Netzkabel, sodass niemand darauf tritt oder es geknickt wird, insbesondere an Steckern oder Buchsen und ihren Austrittsstellen aus dem Gerät.
11. Verwenden Sie nur die vom Hersteller erhältlichen Zubehörgeräte oder Zubehörteile.
12.  Verwenden Sie nur einen Wagen, Stativ, Dreifuß, Träger oder Tisch, der den Angaben des Herstellers entspricht oder zusammen mit dem Gerät verkauft wurde. Wird ein Wagen verwendet, bewegen Sie den Wagen mit dem darauf befindlichen Gerät besonders vorsichtig, damit er nicht umkippt und möglicherweise jemand verletzt wird.
13. Trennen Sie das Gerät während eines Gewitters oder während längerer Zeiträume, in denen es nicht benutzt wird, von der Stromversorgung.
14. Lassen Sie sämtliche Wartungsarbeiten von qualifizierten Kundendiensttechnikern durchführen. Eine Wartung ist erforderlich, wenn das Gerät in irgendeiner Art beschädigt wurde, etwa wenn das Netzkabel oder der Netzstecker beschädigt wurden, Flüssigkeit oder Gegenstände in das Gerät gelangt sind, das Gerät Regen oder Feuchtigkeit ausgesetzt wurde, nicht normal arbeitet oder heruntergefallen ist.
15. Der Erdungsstift darf nie entfernt werden. Auf Wunsch senden wir Ihnen gerne unsere kostenlose Broschüre „Shock Hazard and Grounding“ (Gefahr durch elektrischen Schlag und Erdung) zu. Schließen Sie nur an die Stromversorgung der Art an, die am Gerät neben dem Netzkabel angegeben ist.
16. Wenn dieses Produkt in ein Geräte-Rack eingebaut werden soll, muss eine Versorgung über die Rückseite eingerichtet werden.
17. Hinweis – Nur für Großbritannien: Sollte die Farbe der Drähte in der Netzleitung dieses Geräts nicht mit den Klemmen in Ihrem Stecker übereinstimmen, gehen Sie folgendermaßen vor:
 - a) Der grün-gelbe Draht muss an die mit E (Symbol für Erde) markierte bzw. grüne oder grün-gelbe Klemme angeschlossen werden.
 - b) Der blaue Draht muss an die mit N markierte bzw. schwarze Klemme angeschlossen werden.
 - c) Der braune Draht muss an die mit L markierte bzw. rote Klemme angeschlossen werden.
18. Dieses Gerät darf nicht ungeschützt Wassertropfen und Wasserspritzern ausgesetzt werden und es muss darauf geachtet werden, dass keine mit Flüssigkeiten gefüllte Gegenstände, wie z. B. Blumenvasen, auf dem Gerät abgestellt werden.
19. Belastung durch extrem hohe Lärmpegel kann zu dauerhaftem Gehörverlust führen. Die Anfälligkeit für durch Lärm bedingten Gehörverlust ist von Mensch zu Mensch verschieden, das Gehör wird jedoch bei jedem in gewissem Maße geschädigt, der über einen bestimmten Zeitraum ausreichend starkem Lärm ausgesetzt ist. Die US-Arbeitsschutzbehörde (Occupational and Health Administration, OSHA) hat die folgenden zulässigen Pegel für Lärmbelastung festgelegt:

Dauer pro Tag in Stunden	Geräuschpegel dBA, langsame Reaktion
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 oder weniger	115


Laut OSHA kann jede Belastung über den obenstehenden zulässigen Grenzwerten zu einem gewissen Gehörverlust führen. Sollte die Belastung die obenstehenden Grenzwerte übersteigen, müssen beim Betrieb dieses Verstärkungssystems Ohrstöpsel oder Schutzvorrichtungen im Gehörgang oder über den Ohren getragen werden, um einen dauerhaften Gehörverlust zu verhindern. Um sich vor einer möglicherweise gefährlichen Belastung durch hohe Schalldruckpegel zu schützen, wird allen Personen empfohlen, die mit Geräten arbeiten, die wie dieses Verstärkungssystem hohe Schalldruckpegel erzeugen können, beim Betrieb dieses Geräts einen Gehörschutz zu tragen.

BEWAHREN SIE DIESE SICHERHEITSHINWEISE AUF!

INSTRUCTIONS IMPORTANTES DE SECURITE

ATTENTION: L'utilisation de tout appareil électrique doit être soumise aux précautions d'usage incluant:



1. Lire ces instructions.
2. Gardez ce manuel pour de futures références.
3. Prêtez attention aux messages de précautions de ce manuel.
4. Suivez ces instructions.
5. N'utilisez pas cette unité proche de plans d'eau.
6. N'utilisez qu'un tissu sec pour le nettoyage de votre unité.
7. N'obstruez pas les systèmes de refroidissement de votre unité et installez votre unité en fonction des instructions de ce manuel.
8. Ne positionnez pas votre unité à proximité de toute source de chaleur.
9. Connectez toujours votre unité sur une alimentation munie de prise de terre utilisant le cordon d'alimentation fourni.
10. Protégez les connecteurs de votre unité et positionnez les cablages pour éviter toutes déconnexions accidentelles.
11. N'utilisez que des fixations approuvées par le fabricant.
12. Lors de l'utilisation sur pied ou poteau de support, assurez dans le cas de déplacement de l'ensemble enceinte/support de prévenir tout basculement intempestif de celui-ci.
13.  Il est conseillé de déconnecter du secteur votre unité en cas d'orage ou de durée prolongée sans utilisation.
14. Seul un technicien agréé par le fabricant est à même de réparer/contrôler votre unité. Celle-ci doit être contrôlée si elle a subi des dommages de manipulation, d'utilisation ou de stockage (humidité,...).
15. Ne déconnectez jamais la prise de terre de votre unité.
16. Si votre unité est destinée à être montée en rack, des supports arrière doivent être utilisés.
17. Note pour les Royaumes-Unis: Si les couleurs de connecteurs du câble d'alimentation ne correspondent pas au guide de la prise secteur, procédez comme suit:
 - a) Le connecteur vert et jaune doit être connecté au terminal noté E, indiquant la prise de terre ou correspondant aux couleurs verte ou verte et jaune du guide.
 - b) Le connecteur Bleu doit être connecté au terminal noté N, correspondant à la couleur noire du guide.
 - c) Le connecteur marron doit être connecté au terminal noté L, correspondant à la couleur rouge du guide.
18. Cet équipement électrique ne doit en aucun cas être en contact avec un quelconque liquide et aucun objet contenant un liquide, vase ou autre ne devrait être posé sur celui-ci.
19. Une exposition à de hauts niveaux sonores peut conduire à des dommages de l'écoute irréversibles. La susceptibilité au bruit varie considérablement d'un individu à l'autre, mais une large majorité de la population expérimentera une perte de l'écoute après une exposition à une forte puissance sonore pour une durée prolongée. L'organisme de la santé américaine (OSHA) a produit le guide ci-dessous en rapport à la perte occasionnée:

Durée par Jour (heures)	Niveau sonore moyen (dBA)
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 ou inférieur	115

D'après les études menées par le OSHA, toute exposition au delà des limites décrites ci-dessus entraînera des pertes de l'écoute chez la plupart des sujets. Le port de système de protection (casque, oreillette de filtrage,...) doit être observé lors de l'opération cette unité ou des dommages irréversibles peuvent être occasionnés. Le port de ces systèmes doit être observé par toutes personnes susceptibles d'être exposées à des conditions au delà des limites décrites ci-dessus.

GARDEZ CES INSTRUCTIONS!

INSTRUCCIONES IMPORTANTES PARA SU SEGURIDAD



CUIDADO: Cuando use productos electrónicos, debe tomar precauciones básicas, incluyendo las siguientes:

1. Lea estas instrucciones.
2. Guarde estas instrucciones.
3. Haga caso de todos los consejos.
4. Siga todas las instrucciones.
5. No usar este aparato cerca del agua.
6. Limpiar solamente con una tela seca.
7. No bloquear ninguna de las salidas de ventilación. Instalar de acuerdo a las instrucciones del fabricante.
8. No instalar cerca de ninguna fuente de calor como radiadores, estufas, hornos u otros aparatos (incluyendo amplificadores) que produzcan calor.
9. No retire la patilla protectora del enchufe polarizado o de tipo "a Tierra". Un enchufe polarizado tiene dos puntas, una de ellas más ancha que la otra. Un enchufe de tipo "a Tierra" tiene dos puntas y una tercera "a Tierra". La punta ancha (la tercera) se proporciona para su seguridad. Si el enchufe proporcionado no encaja en su enchufe de red, consulte a un electricista para que reemplaze su enchufe obsoleto.
10. Proteja el cable de alimentación para que no sea pisado o pinchado, particularmente en los enchufes, huecos, y los puntos que salen del aparato.
11. Usar solamente añadidos/accesorios proporcionados por el fabricante.
12. Usar solamente un carro, pie, trípode, o soporte especificado por el fabricante, o vendido junto al aparato. Cuando se use un carro, tenga cuidado al mover el conjunto carro/aparato para evitar que se dañe en un vuelco. No suspenda esta caja de ninguna manera.
13. Desenchufe este aparato durante tormentas o cuando no sea usado durante largos periodos de tiempo.
14. Para cualquier reparación, acuda a personal de servicio cualificado. Se requieren reparaciones cuando el aparato ha sido dañado de alguna manera, como cuando el cable de alimentación o el enchufe se han dañado, algún líquido ha sido derramado o algún objeto ha caído dentro del aparato, el aparato ha sido expuesto a la lluvia o la humedad, no funciona de manera normal, o ha sufrido una caída.
15. Nunca retire la patilla de Tierra. Escríbanos para obtener nuestro folleto gratuito "Shock Hazard and Grounding" ("Peligro de Electrocutación y Toma a Tierra"). Conecte el aparato sólo a una fuente de alimentación del tipo marcado al lado del cable de alimentación.
16. Si este producto va a ser enracado con más equipo, use algún tipo de apoyo trasero.
17. Nota para el Reino Unido solamente: Si los colores de los cables en el enchufe principal de esta unidad no corresponden con los terminales en su enchufe, proceda de la siguiente manera:
 - a) El cable de color verde y azul debe ser conectado al terminal que está marcado con la letra E, el símbolo de Tierra (earth), coloreado en verde o en verde y amarillo.
 - b) El cable coloreado en azul debe ser conectado al terminal que está marcado con la letra N o el color negro.
 - c) El cable coloreado en marrón debe ser conectado al terminal que está marcado con la letra L o el color rojo.
18. Este aparato eléctrico no debe ser sometido a ningún tipo de goteo o salpicadura y se debe tener cuidado para no poner objetos que contengan líquidos, como vasos, sobre el aparato.
19. La exposición a altos niveles de ruido puede causar una pérdida permanente en la audición. La susceptibilidad a la pérdida de audición provocada por el ruido varía según la persona, pero casi todo el mundo perderá algo de audición si se expone a un nivel de ruido suficientemente intenso durante un tiempo determinado. El Departamento para la Salud y para la Seguridad del Gobierno de los Estados Unidos (OSHA) ha especificado las siguientes exposiciones al ruido permisibles:

Duración por Día en Horas	Nivel de Sonido dBA, Respuesta Lenta
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ o menos	115

De acuerdo al OSHA, cualquier exposición que exceda los límites arriba indicados puede producir algún tipo de pérdida en la audición. Protectores para los canales auditivos o tapones para los oídos deben ser usados cuando se opere con este sistema de sonido para prevenir una pérdida permanente en la audición, si la exposición excede los límites indicados más arriba. Para protegerse de una exposición a altos niveles de sonido potencialmente peligrosa, se recomienda que todas las personas expuestas a equipamiento capaz de producir altos niveles de presión sonora, tales como este sistema de amplificación, se encuentren protegidas por protectores auditivos mientras esta unidad esté operando.

GUARDE ESTAS INSTRUCCIONES!

16FX™, 24FX™ and 32FX™ **4-Bus Console Mixer**

Congratulations on purchasing the Peavey 16FX™, 24FX™ or 32FX™ four-bus console mixer. The Peavey 16FX™, 24FX™ and 32FX™ are studio-quality mixing consoles designed to meet diverse needs. These consoles feature Peavey-exclusive technology that enhances live studio reproduction as well as project studio recording, making them perfect for every venue. FX™ Series mixers also feature built-in DSP effects that are useful in real-world recording and sound reinforcement, while parameter controls allow you to tailor each effect to meet your needs.

Please read this guide carefully to ensure your personal safety as well as the safety of your equipment.

FEATURES:

- Silencer™ mic preamps with current-source dual feedback design
- 12 XLR mic inputs on 16FX, 20 XLR mic inputs on 24FX, 28 XLR mic inputs on 32FX
- Two stereo channels with direct-to-L/R assignment capability
- Three-band channel EQ on all input channels
- Sweepable mid-frequency control on all mono input channels
- 75 Hz low-cut filter on all mono input channels
- Inserts on all mono channels
- Four-bus design with direct group outputs and L/R assignment
- Four monitor sends per channel, pre-fader
- Two effects sends per channel, post-fader
- Pan and PFL on each channel
- Clip LEDs for the entire signal path for clipping
- Signal presence LEDs on every input, group and return
- Mute switches with LED indicator on every input, group and return channel
- 48-volt phantom power switch
- Dual DSP engines for output processing, dual effects and digital I/O
- Output processing includes EQ, Delay and Compressor/Limiter
- Large LCD graphics user interface
- Dual USB ports
- Direct streaming of audio to and from your computer
- Built-in MP3 compression, direct recording and playback via USB removable data storage device
- Media inputs with level control assignable to L/R mix
- Headphone output with level control
- Two 12V BNC lamp jacks (24FX and 32FX mixers only)

MONO INPUT CHANNELS

1 Gain
 This control establishes the nominal operating level for the channel. The input gain can be adjusted over a wide range (0 dB – 60 dB) to compensate for soft voices or very loud drums. To maximize the signal-to-noise ratio, the gain should be set to the proper level, with the Channel Fader (13) set to 0. It can be set by pressing the PFL Switch (12) and adjusting for 0 dB on the output meter. If the clip LED comes on and remains lit, reduce the gain.

2 Lo Cut
 The low-cut filter has a corner frequency of 75 Hz. When engaged, it can improve clarity by removing low frequencies that make a mix sound muddy. This filter reduces handling and stage noise, breathing noise, and unwanted low frequency energy that can rob your sound system of power. Engaging this switch will remove those frequencies from the system and restore power where needed. We recommend engaging it for all channels except those with the lowest bass tones such as Bass guitar and Kick drum.

3 Hi EQ
 This shelving type tone control adjusts treble frequency levels (± 15 dB at 10 KHz), resulting in less noise or more brilliance.

4 Mid EQ
 This active tone control is a bandpass (peak/notch) type that varies mid-frequency response by ± 15 dB in a range from 100 Hz to 5 kHz. The center frequency is controlled by the Mid Freq (5) control.

5 Mid Freq
 This control determines the center frequency of the Mid EQ (4) control. Center frequency for the bandpass filter can be set from 100 Hz to 5 kHz.

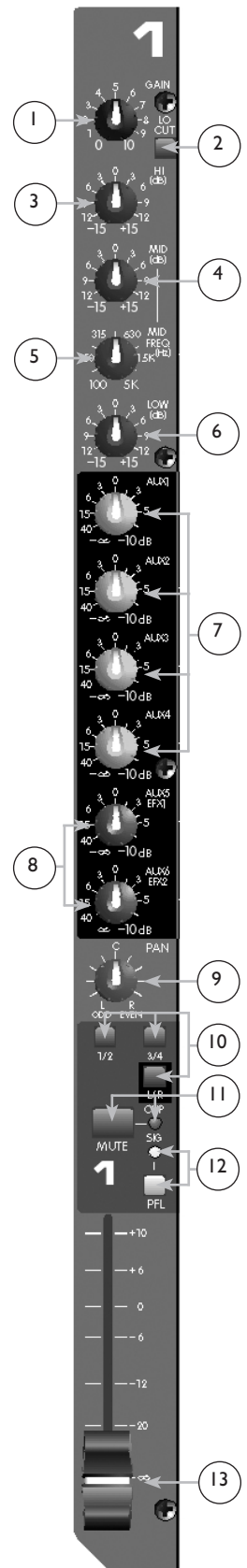
6 Low EQ
 This shelving-type tone control adjusts bass frequency levels (± 15 dB at 70 Hz), adding depth to thin signals or clarity to overly thick signals.



Caution: Excessive low frequency boost causes increased power consumption and increases the possibility of speaker damage.

7 AUX 1-4 Sends
 These controls send the channel's pre-fader, post-EQ signal to each of four aux buses. These buses are normally used for monitor sends or for feeding a separate mix to external equipment. There are internal jumpers that can be switched to change the send point to pre-EQ. Unity gain is at the center detent position with up to 10 dB of gain in the fully clockwise position.

8 AUX 5-6/EFX 1-2 Sends
 These controls send the channel's post-fader signal to each of two aux (effects) buses. These buses are normally used for effects sends or for feeding the internal effects processors. Unity gain is at the center detent position with up to 10 dB of gain in the fully clockwise position.



- 9 Pan**
This control determines the signal's position with respect to the assigned L/R and Group 1–4 buses. Rotating the control counterclockwise increases the amount of signal sent to L and odd-numbered groups; rotating clockwise increases the amount sent to R and even-numbered groups. For example, with the channel Bus Assign switch (10) in the 1/2 position, rotating the control counterclockwise increases the amount of signal sent to Group 1, while rotating clockwise increases the amount sent to Group 2. The C position sends equal amounts to each.
- 10 1/2, 3/4, L/R Bus Assign Switches**
These post-fader switches determine where the channel signal is being sent. For example, to send a signal to Groups 1 & 2, depress the 1/2 button. The PAN control (9) determines the signal level that is sent to each signal bus.
- 11 Mute Switch/Mute-Clip LED**
This switch mutes all Aux, Group and L/R sends from the corresponding channel. This switch is equipped with a red LED that will illuminate when the channel is muted. When the MUTE button is *out*, the LED functions as a Clip indicator that will illuminate at 2 dB below clipping. Muting the channel does not prevent the PFL signal from being sent to the PFL/AFL mix when the PFL Switch (12) is *in*.
- 12 PFL Switch/Signal-PFL LED**
This switch connects the channel's pre-fader signal to the PFL/AFL mix. When the PFL button is *in*, the channel's signal can be monitored through the headphones and/or on the PFL/AFL display. A yellow LED in the Master section will blink to indicate that the signal on the Master LED display and at the headphone output is PFL. Selecting PFL allows the operator to monitor a channel even with the channel muted, and is especially useful for cuing CDs/tapes. When the PFL button is *out*, the yellow channel LED will function as a signal presence indicator (-30 dBu).
- 13 Channel Fader**
This control varies the signal level from $-\infty$ to +10 dB and sends the signal from the channel to the L/R and Group buses and to the Effects Sends. The optimum setting is the \emptyset (unity gain) position.

STEREO INPUT CHANNELS

14 **Mic Gain**

This control establishes the nominal operating level for the mic input (XLR) of the channel. The mic gain can be adjusted over a wide range (0 dB – 60 dB) to compensate for soft voices or very loud drums. To maximize the signal-to-noise ratio, the gain should be set to the proper level, with the Channel Fader (13) set to 0. The mic gain can be set by pressing the PFL button (12) and adjusting for 0 dB on the output meter. If the clip LED comes on and remains lit, reduce the gain.

15 **Stereo Gain**

This control establishes the nominal operating level for the stereo line inputs (1/4" jacks) of the channel. The Stereo Gain can be adjusted over a sufficient range (-∞ to +20 dB) to accommodate almost any input level. It operates in conjunction with the L/R-CH Switch (16) to route the stereo signal directly to the L/R buses or through the channel strip.

16 **L/R-CH Switch**

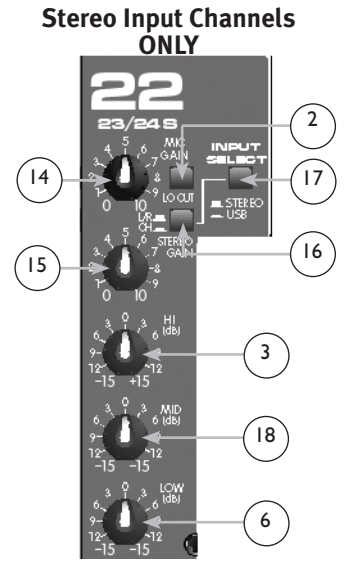
This switch establishes the routing of the stereo line input (1/4" jacks) signal. When the switch is *out*, the stereo line input signal is routed directly to the L/R buses, bypassing the channel strip. In this mode, the mic input (XLR) signal is routed through the channel. When the switch is *in*, the stereo line input signal is routed through the channel and the mic input signal is disconnected. The signal level is controlled via the Stereo Gain control (15).

17 **Input Select Stereo-USB Switch**

This switch selects the input signal that will feed the stereo line input of the second stereo channel. When the switch is *out*, the signal from the stereo line inputs is routed to the Stereo Gain control (15). When the switch is *in*, the signal from the device connected to either USB port (60-61) is routed to the Stereo Gain control (15).

18 **Mid EQ**

In the Stereo Input channels, this active tone control is a bandpass (peak/notch) type that varies mid-frequency response by ±15 dB at a center frequency of 850 Hz.



MASTER SECTION

19 **Auxiliary Masters 1-4**

This control sets the output level of the AUX 1-4 mixes and is adjustable from -∞ to +10 dB.

20 **Auxiliary Masters 5-6**

This control sets the output level of the various AUX 5-6 mixes and is adjustable from -∞ to +10 dB. These signals are also sent to the EFX1 and EFX2 internal effects processors, respectively.

21 **AFL Switch/AFL-Clip LED**

This switch directs the post-fader (AFL) signal to the Headphone output (37) and activates the PFL/AFL LED display. An adjacent red LED illuminates to signify this selection. If AFL is not selected, the LED functions as a Clip indicator. Selecting AFL allows monitoring of AUX Masters with the full PFL/AFL Level Display as well as allowing the operator to hear the output.

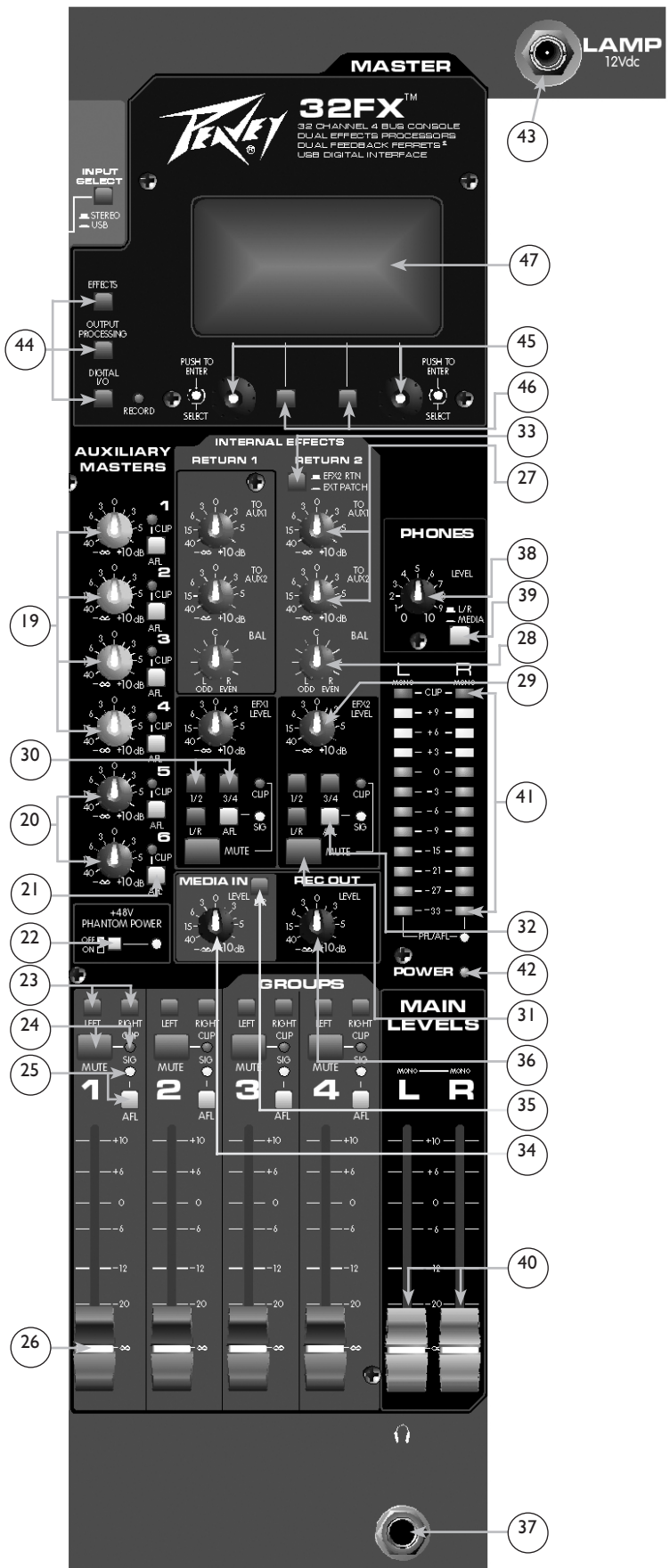
22 Phantom Power Switch
 This switch applies +48 VDC voltage to the input XLR connectors to power condenser microphones requiring phantom power. This switch is recessed into the console and requires a small “tool” such as a pencil or pen tip to activate. A regular low impedance dynamic mic such as the PVM™ 22 will not be harmed. The Line inputs (49&50) are not connected to the +48 V supply and are safe for balanced or unbalanced inputs. An adjacent LED illuminates when Phantom Power is activated.

Caution:
If phantom power is used, do not connect unbalanced dynamic microphones or other devices to the XLR inputs. (Some wireless receivers may be damaged. Consult their manuals.)

Note:
Make sure the Master Level Faders (40) are completely down when switching on the phantom power and when connecting microphones to the Mic inputs to prevent pops from affecting the loudspeakers.

23 Left, Right, Bus Assign Switches
 These post-fader switches determine where the Group mix signal is being sent. For example, if each individual drum mic is assigned to Group 1, depressing the Left button will send the drum mix to the Left bus and to the Left Out (54) on the rear panel.

24 Mute Switch/Mute-Clip LED
 This switch mutes its respective Group send from the Group channel. This switch is equipped with a red LED that will illuminate when the Group is muted. When the Mute button is *out*, the LED functions as a Clip indicator that will illuminate at 2 dB below clipping.



25 **AFL Switch/Signal-AFL LED**

This switch connects the Group's post-fader signal to the PFL/AFL mix. When the AFL button is *in*, the Group's signal can be monitored through the headphones and/or on the PFL/AFL display. A yellow LED in the Master section will blink to indicate that the signal on the Master LED display and the Headphone Output is the PFL/AFL mix. When the AFL button is *out*, the yellow group LED will blink as an indication of signal presence (-30 dBu).

26 **Group Fader**

This control varies the signal level from $-\infty$ to +10 dB and sends the signal from the Group to the Left and/or Right buses and to the Group Output jacks (53). The optimum setting is the \emptyset (unity gain) position.

27 **TO AUX 1 & TO AUX 2 Controls**

These controls determine the level of the respective Effects Return signal that is sent to the respective AUX bus, allowing musicians/singers to hear internal and/or external effects in their monitors.

NOTE: Due to the creation of an electronic feedback loop, do not use AUX Sends 1 or 2 as the path to external equipment that is to be sent back to the corresponding AUX mix (1 or 2).

28 **BAL**

This control determines the placement of the Effects Return signal's position with respect to the assigned L/R and Group 1-4 buses. Rotating the control counterclockwise (L) sends more signal to the LEFT output and odd-numbered GROUPS; rotating clockwise (R) sends more signal to the RIGHT output and even-numbered GROUPS. The C position sends equal amounts to each.

29 **EFX LEVEL Control**

This control determines the level of the Effects Return signal being sent to its assigned buses. It functions similarly to the Channel Faders (13).

30 **1/2, 3/4, L/R Bus Assign Switches**

Like the channel assign switches, these buttons determine the bus assignment of the Effects Return signal. They determine where the signal is being sent.

31 **Mute Switch/Mute-Clip LED**

This switch mutes its respective Effects Return from being sent to the buses. This switch is equipped with a red LED that will illuminate when the Effects is muted. When the Mute button is *out*, the LED functions as a Clip indicator that will illuminate at 2 dB below clipping.

32 **AFL Switch/Signal-AFL LED**

This switch connects the Effects Return post-fader signal to the PFL/AFL mix. When the AFL button is *in*, the Effects Return signal can be monitored through the headphones and/or on the PFL/AFL display. A yellow LED in the Master section will blink to indicate that the signal on the Master LED display and the Headphone Output is the PFL/AFL mix. When the AFL button is *out*, the yellow Effects Return LED will blink as an indication of signal presence (-30 dBu).

33 **Effects 2 Patch Switch**

This switch determines whether the Effects 2 processor will be used in the Return 2 or will be patched to an Input Channel or Group insert point. This switch can also be used to perform the bypass function. When the effects processor is assigned to the EFX 2 Return, the I/O jack (56) is bypassed. Similarly, when the effects processor is being patched externally, only the external Stereo Return jacks (57) are used to return a signal.

34 Media In Level Control
Controls the level of the Media Input signal from the RCA jacks (58) to the Left and Right buses when the L/R switch (35) is *in*.

35 Media In L/R Switch
Routes the Media Input signal to the Left and Right buses.

36 Record Out Control
Controls the Record Output level of the pre-fader Left and Right main output signal to the RCA jacks (59).

Regardless of the position of the L/R–Media Switch (39), when any PFL/AFL switch on the mixer is activated, this display indicates the signal level being sent to the PFL/AFL bus. The PFL/AFL indicator flashes if either mode (PFL or AFL) is selected.

37 Headphone Output Jack
The Headphone Output is a 1/4" TRS (Tip= Left; Ring = Right; Sleeve = Ground) jack. The signal sent to this output is normally the Left/Right mix. When the L/R–Media Switch (39) is engaged, the Media Input signal is selected and is monitored through headphones. An activated PFL or AFL button (indicated by a yellow flashing LED) switches the headphone output jack monitor to the selected signal.

38 Headphone Level
This control sets the Headphone Output level. To avoid damage to your hearing, make sure to turn the control fully counterclockwise before using headphones. Slowly turn the knob clockwise until you reach a comfortable listening level. Normally, the signal in the headphones is the Left/Right signal. If the L/R–Media Switch (39) is engaged, the Media Input signal is selected and monitored through headphones. An activated PFL or AFL button (indicated by a yellow flashing LED) switches the headphone level monitoring to the selected signal.

39 L/R–Media Switch
This switch selects the signal that is monitored by the headphones. When *out*, the Main Left/Right post-fader signal is monitored. When *in*, the Media Input post-fader signal is monitored.

40 Master Level Faders
The Master Faders control the levels sent to the Main Left/Right outputs (54). Best results are obtained when these controls are set near the 0 point.

41 Left/Right – PFL/AFL Level Displays
These indicators graphically display the level of the signal selected by the L/R–Media Switch (38). When the switch is *in*, these indicators show the level of the post-fader level of the Media Input. When the switch is *out*, these indicators show the level of the Main Left and Right outputs. Signal is sampled at the summing amp and post-master faders to monitor clipping throughout the Left/Right section. The Clip LED indicator will illuminate when any level in the signal chain approaches (-2 dB) clipping.
NOTE: Clip LED can illuminate before the rest of the array indicating the summing amp reaches clipping.

42 Power LED
This LED indicates that AC power is supplied to the unit, the power switch is *on*, and the unit is functioning properly.

43 Lamp 12Vdc (24FX™ and 32FX™ mixers only)
These outputs are designed to power gooseneck lamps such as the Peavey ML-1.



DIGITAL PROCESSOR

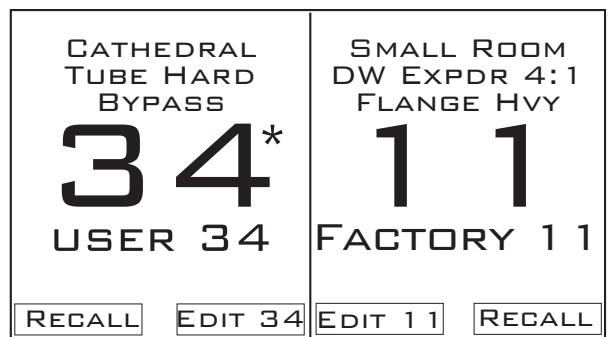
- 44 **Page Select Switches (A-B-C)**
Use these three switches to select the desired digital processor page that is shown in the LCD Graphics User interface (47) and controlled by the encoders (45) and the soft switches (46).
- 45 **Software Encoders**
These encoders allow you to edit the selected parameters as indicated on the LCD (47).
- 46 **Software Switches**
These switches select the functions that are indicated on the LCD (47).
- 47 **LCD**
The Liquid Crystal Display reveals all of the menus available for editing.

DIGITAL PROCESSING ARENA

This is a brief overview of the digital processing capabilities of your new FX™ mixer. While you can expect incredible results following this guide, mastering the art of digital processing will be achieved through experimentation. Keep in mind that until you confirm your changes by pressing "save", no alterations have been made to the presets. Peavey engineers programmed your mixer with a variety of the most commonly used presets, which are ready to use right out of the box. However, your FX mixer will only reach its full digital processing potential through your acquired expertise. Review the process below and begin exploring the digital mixing world beyond factory presets.

44A Effects Screen

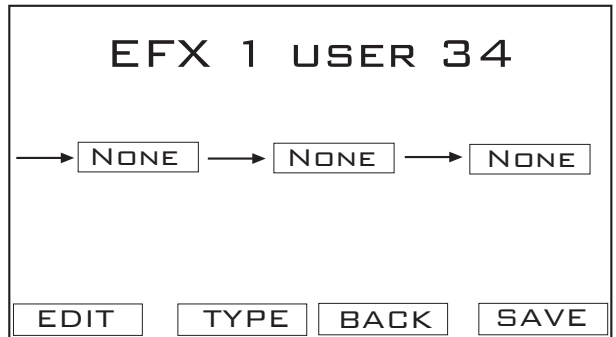
When you power up your FX Mixer, the Peavey logo will briefly appear on the LCD (47). In a few seconds, once the mixer software is fully loaded, the effects screen will appear on the LCD (47). Your FX Mixer features a variety of commonly used factory presets and plenty of user-defined, customizable presets. Each preset effect may contain 1-3 effects. The split screen display (EFX 1 and EFX 2) contains information for the current, active presets. The two active presets shown on the LCD (47) are independent and can be assigned to any channel(s) using EFX 1-2 Sends (8). The screen displays the preset number (effects 1-99), the title for that individual effect (Church Choir, for example), and which effects are included in that preset (compressor, reverb, delay, etc.). To change the preset for EFX 1 or EFX 2, use the corresponding Software Encoder knob (45). When you reach the desired preset, you will be prompted to select the new preset by pressing the Effects switch (44). An asterisk will appear beside any preset number that has been edited but not saved. Once a new preset has been selected, you may return to the previous preset by pressing the software encoder (Recall). To edit a preset, press the software switch labeled Edit and follow the on-screen directions, which allow individual parameter changes. For example, you may wish to increase the bass and decrease the amount of reverb on the "Joe's Bar" preset(preset 37). The "lib" (library) is a helpful place to start. Peavey has pre-programmed your FX mixer with a library of commonly used effects settings (Delay, Reverb, Deesser, etc.). You may choose to use the library effect as programmed or tweak the parameters to your own personal preference.





IMPORTANT: When a signal passes through a digital effects processor, a short delay results. When this same signal returns to the mixer and combines with the main output, the small delay difference results in a comb filter. (Short changing delays are the basis of wah-wah effects.) To prevent the comb-filter effect, increase the delay time simply by including an effect block such as reverb or delay.

Note that many effects like compressor, limiter, gate, chorus, etc., do not work well when used alone on an effects send. Fortunately, the EFX 2 Patch Jack (56) can be patched directly into an Insert (48) on any channel or subgroup (Group Inserts (54)). Press the EFX 2 Patch Switch (33) to activate the patch. In this configuration, comb filtering is eliminated because the only signal path is through the processor.



If you make a mistake, you do not have to start over. The “undo” button will revert the last change to its original setting, much like the undo command in a word processor. To make further refinements to any user-defined preset, you have two choices: press the "back" button and start completely over, or simply use the soft knobs (45-46) to return to the individual effect within a preset. Remember, factory presets cannot be altered by the user. If you choose to adjust or build on a factory preset (which we encourage you to do), your saved settings will be automatically directed to the next, unused, customized preset.

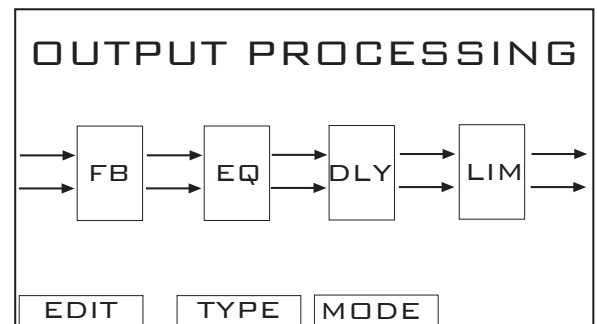


WARNING: When user-defined, customizable presets are saved, they will automatically replace the current settings for that preset UNLESS you assign a new preset number. If you overwrite the originally saved preset settings, the old settings are no longer retrievable.

QUICK TIP: From anywhere within the digital arena, you can return to the main effects screen simply by pressing the Effects Button (44A).

44B Output Processing

Pressing the Output Processing button (44B) allows users to adjust the main (L-R) signal output from the FX™ mixer, in your choice of stereo output, dual mono output, or subwoofer output modes. Users can create and save presets for all three effects combined. Your mixer is also equipped with one “neutral” preset, allowing an unadjusted (zero) starting place for creating a new preset.



By default, the stereo output menu appears when the Output Processing button (44B) is pressed. If you prefer to work in dual-mono-output or subwoofer mode, return to the main output processing screen by pressing the “mode” soft knob choice.

Stereo Output Mode

The stereo output option features four customizable output effects: Feedback Ferret®, EQ, Delay, and Limiter. To edit an effect, press the Soft Encoder button (45) and then enter the edit mode using Soft Switches (46). To save a new preset (save current) or to use a previously saved setting (load saved), enter the “lib” (library) mode using the soft knobs (45-46).

Remember, in stereo mode these parameter adjustments are made to both the left and right channels equally.

Dual Mono Output Mode

The dual mono output mode functions exactly like the stereo mode except that parameters may be adjusted independently for left and right channels. To save a new preset (save current) or to use a previously saved setting (load saved), enter the "lib" (library) mode using the soft knobs (45-46).

Subwoofer Output Mode

This mode features an internal crossover filter that allows you to adjust parameters of frequency levels (high frequencies feed to the left channel and low frequencies feed to the right). To save a new preset (save current) or to use a previously saved setting (load saved), enter the "lib" (library) mode using the soft knobs (45-46).

44C Digital I/O

Pressing the Digital I/O (44C) allows user access to the utility or USB menu options.

Utility Menu Options

Entering the utility function allows users to adjust screen contrast, assign two levels of user accessibility (security), change or access password, or restore the unit to the original factory presets.

To accommodate lighting, LCD (47) viewing may be adjusted simply by entering the "view angle" option from the main utility screen using soft knobs (45-46) to make all adjustments.



To accommodate varying users, your FX™ mixer is equipped with a two-level security system. The main mixer operator user controls who can do what with the digital effects board, granting passwords to people for specific processing rights such as disabling effects edit, disabling output edit, etc. Security settings can be adjusted simply by entering the security choice option from the main utility screen using the soft knobs (45-46) to make all adjustments.

MASTER USER TIP: Peavey highly recommends that you set a security password. Allowing someone else to operate your unsecured FX mixer grants that user complete access to change all of your settings. Security passwords protect the time you spent to get your presets just right while allowing you to safely provide digital processing access for even the most inexperienced users.

In the event you wish to change your password, press the "change password" button from the main Digital I/O menu (44C), and follow on-screen directions.



IMPORTANT: Write and store your password in a safe place. No one other than you should have access to this password; loss of your password could result in your inability to change settings.

CAUTION: Restoring the factory settings option resets your mixer's presets, reformatting factory presets and erasing all other user presets. (This option is handy when your venue has permanently changed and all-new presets are required.) Once confirmed, the presets are not retrievable and will be permanently lost. Should you select this option in error, a warning screen allows you to cancel the procedure.

USB Menu Options

Entering the USB function allows users to play or record .mp3, .aiff and .wav files using a USB drive (purchased separately).

This feature is perfect for playing a pre-recorded musical piece through assigned channels of your mixer. USB drives also allow you to record specific segments of your work or an entire gig up to the amount of free memory available on your USB drive. After connecting a USB drive to the USB port (60), enter the USB menu. Follow on-screen instructions to select files available for playback or to name files for recording, again using soft knobs (45-46) to make all selections.

Firmware Updates

To install a firmware update, hold down the left Software Encoder (45) while powering up your mixer. Follow on-screen prompts to complete your process. Necessary files can be downloaded from the Internet and installed using your computer or an optional USB drive. If the installation is successful, your mixer will automatically restart. If unsuccessful, or to exit the update mode, press the power button to restart.

Rear Panel

CONNECTIONS

Inserts

These jacks are 1/4" Tip/Ring/Sleeve (TRS) connectors that allow external signal processors to be inserted into the Input Channel signal path. Tip=Send; Ring=Return; Sleeve=Ground. One of the on-board effects processors can be patched to any channel with an Insert.

Line (1/4") Inputs

These jacks are 1/4" balanced (TRS) high-impedance inputs. The tip is the positive input and should be used for unbalanced inputs. It has 20 dB less gain than the XLR input and does not have phantom power available. The Mic and Line inputs should not be used simultaneously.

Mic (XLR) Inputs

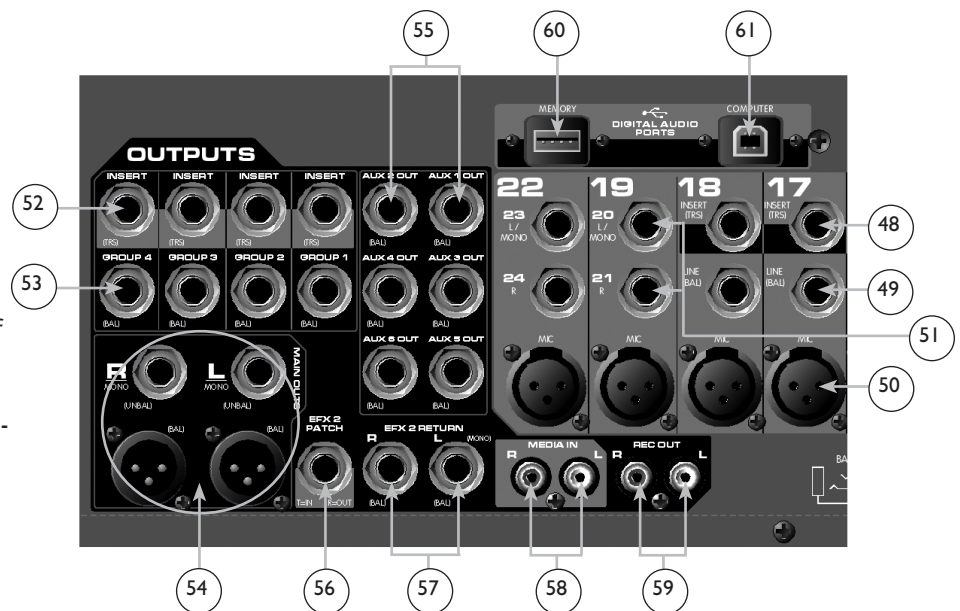
XLR balanced inputs optimized for a microphone or other low impedance source. Pin 2 is the positive input. Because of the wide range of gain adjustment, signal levels up to +14 dBu can be accommodated.

Stereo (1/4") Inputs

These 1/4" unbalanced inputs work as a stereo line input using both jacks or as a mono input if the connection is made to the L/Mono input only.

Group Inserts

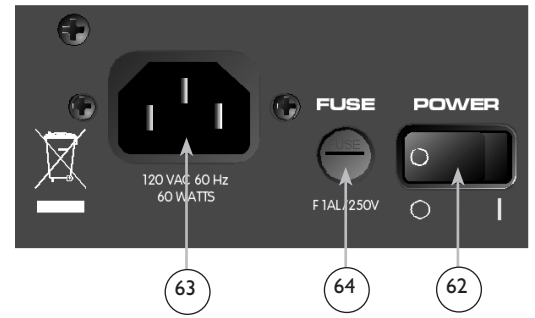
These jacks are 1/4" TRS connectors that allow external signal processors to be inserted into the Group signal path. Tip=Send; Ring=Return; Sleeve=Ground. One of the on-board effects processors can be patched to any Group Insert.



- 53 **Group Outputs**
These Group Outputs feature 1/4" TRS balanced jacks and provide output signal from the Groups. The output level is set by the Group Level faders (26).
- 54 **Left/Right Outputs**
The Left/Right Outputs feature two 1/4" TRS Z-balanced jacks and two fully balanced XLR outputs. The 1/4" outputs can be used with Tip, Ring, Sleeve (TRS) balanced or Tip, Sleeve (TS) unbalanced connectors. The output level is set by the Master Level faders (40). Both outputs can be used simultaneously.
- 55 **AUX 1 - 6 Outputs**
These AUX Outputs feature 1/4" TRS balanced jacks and provide signal from the Auxiliary Outputs. The output level is set by the AUX Level controls (19, 20).
- 56 **Effects 2 Patch Jack**
This 1/4" TRS jack allows the internal Effects 2 processor to be patched to an Input or Group Insert or to an external device. The tip carries the input (return) signal to the compressor and the ring carries the output (send).
- 57 **EFX 2 Return Jacks**
These 1/4" high-impedance balanced inputs can be used as stereo or individual returns. Designed for effects return, they can also be used as additional stereo inputs. The L/Mono input provides signal to both inputs if no connector is attached to the Right jack. The tip is the positive input for both balanced and unbalanced use.
- 58 **Media In Jacks**
The Media Input jacks are set up for a +4 dBu input from a stereo audio media source. The signal feeds the Media In level control (34).
- 59 **Record Output Jacks**
The output jacks can provide a +4 dBu output signal to a stereo recording device. The output level is controlled by the Record Output level control (36).
- 60 **USB Memory Connector**
Use this A-type USB connector to plug in a removable data storage device to read or write MP3-formatted files.
- 61 **USB Computer Connector**
Use this B-type USB connector to connect with a computer.

62 **Power Switch**
Pressing the power switch supplies power to the unit.

63 **Removable Power Cord**
This receptacle is for the IEC line cord (included) that provides AC power to the unit. Connect the line cord to this connector and to a properly grounded AC supply. Damage to the equipment may occur if an improper line voltage is used (see voltage marking on unit).



Never remove or cut the ground pin of the line cord plug. The console is supplied with a properly rated line cord. If lost or damaged, replace this cord with one of the proper rating.

NOTE FOR UK ONLY:

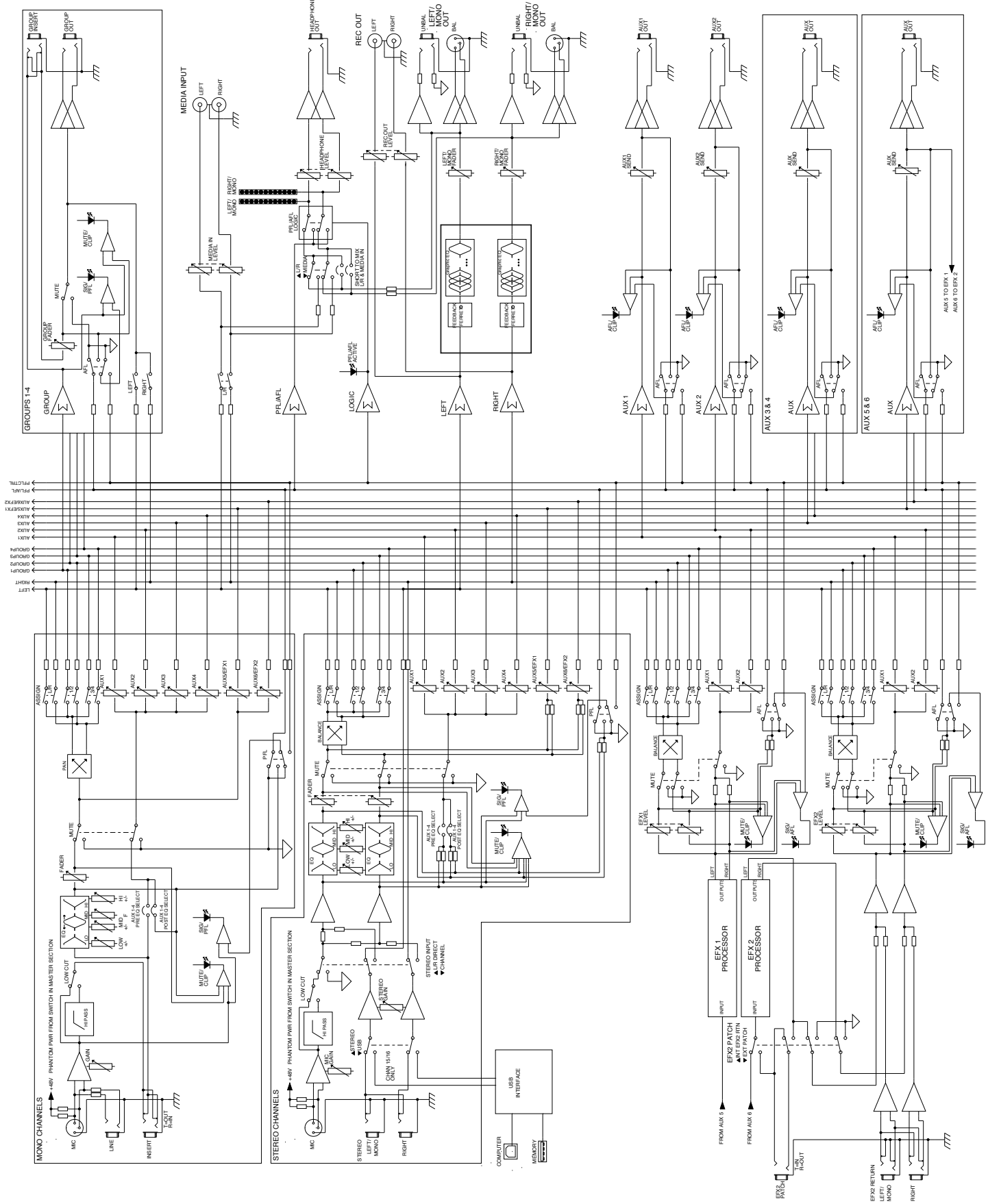
If the colors of the wires in the mains lead of this unit do not correspond with the colored markings identifying terminals in your plug, proceed as follows: (1) The wire that is colored green and yellow must be connected to the terminal marked by the letter E, or by the Earth symbol, or colored green or green and yellow. (2) The wire that is colored blue must be connected to the terminal that is marked with the letter N, or colored black. (3) The wire that is colored brown must be connected to the terminal that is marked with the letter L or colored red.

64 **Line Fuse (16FX™ mixer only)**
The fuse is located within the cap of the fuse holder. If the fuse fails, **THE FUSE MUST BE REPLACED WITH THE SAME TYPE AND VALUE IN ORDER TO AVOID DAMAGE TO THE EQUIPMENT AND TO PREVENT VOIDING THE WARRANTY.** If the mixer repeatedly blows the fuse, it should be taken to a qualified service center for repair.

WARNING: The fuse should only be replaced when the power cord has been disconnected from its power source!



Block Diagram-16FX™, 24FX™ & 32FX™



FX™ Series Specifications

Inputs

Function	Input Z (Ohms min)	Input Gain Setting	Input Levels			Bal/ Unbal	Connector
			Min*	Nominal**	Max		
Microphone (150 Ohms)	2.2k	Max Gain (60 dB)	-76 dBu	-56 dBu	-40 dBu	Bal	XLR Pin 1 Gnd Pin 2 (+) Pin 3 (-)
		Min Gain (0 dB)	-16 dBu	+4 dBu	+20 dBu		
Line (10 k Ohms)	20k	Max Gain (40 dB)	-56 dBu	-36 dBu	-20 dBu	Bal	1/4" TRS; Tip (+) Ring (-) Sleeve Ground
		Min Gain (-20 dB)	+4 dBu	+24 dBu	+40 dBu		
Stereo Line (direct to L/R)	10k	Max Gain (20 dB)	-26 dBu	-16 dBu	+2 dBu	Unbal	1/4" TS; Tip (+) Sleeve Ground
		Nominal Gain (0dB)	-6 dBu	+4 dBu	+22 dBu		
Stereo Line (via channel)	10k	Max Gain (20 dB)	-36 dBu	-16 dBu	+2 dBu	Unbal	1/4" TS; Tip (+) Sleeve Ground
		Nom Gain (0dB)	-16 dBu	+4 dBu	+22 dBu		
Channel and Group Insert Return	22k	N/A (0dB)	-16 dBu	+4 dBu	+22 dBu	Unbal	1/4" TRS; Tip (send) Ring (return) Sleeve Ground
EFX2 Return	20k	Max Gain (10 dB)	-16 dBu	-6 dBu	+12 dBu	Bal	1/4" TRS; Tip (+) Ring (-) Sleeve Ground
		Nom gain (0dB)	-6 dBu	+4 dBu	+22 dBu		
Media In	10k	Max Gain (10dB)	-16 dBu	-6 dBu	+10 dBu	Unbal	RCA Jacks
		Nom Gain (0db)	-6 dBu	+4 dBu	+20 dBu		

0 dBu=0.775 V (RMS)

* Min Input Level (sensitivity) is the smallest signal that will produce nominal output (+4 dBu) with channel and master faders set for maximum gain.

** Nominal settings are defined as all controls set at 0 dB (or 50% rotation for rotary controls) for nominal output. Microphone gain control is as specified.

16FX™, 24FX™ and 32FX™ Specifications

Outputs

Function	Min Load Z (Ω)	Output Levels		Bal/ Unbal	Connector
		Nominal	Max		
Master Left/Right	600	+4 dBu	+22 dBu	Bal	XLR Pin 1 Gnd Pin 2 (+), Pin 3 (-) 1/4" TRS; Tip (+), Ring (-) Sleeve Ground
		+4 dBu	+22 dBu		
Groups 1-4 and Aux 1-6	600	+4 dBu	+22 dBu	Bal	1/4" TRS: Tip (+), Ring (-) Sleeve Ground
Record Out	2k	+4 dBu	+22 dBu	Unbal	RCA Jacks
Channel and Group Insert Send	600	+4 dBu	+22 dBu	Unbal	1/4" TRS; Tip (send), Ring (return) Sleeve Ground
Headphone	8	+4 dBu	+22 dBu	Unbal	1/4" TRS; Tip (left), Ring (right) Sleeve Ground

0 dBu=0.775 V (RMS)

Gain

Mic Input Gain Adjustment Range:	0 dB to +60 dB
Mic Input to Left/Right Balanced Output	80 dB (max gain)
Line Input Gain Range:	-20 dB to +40 dB
Line Input to Left/Right Balanced Output	60 dB (max gain)
Stereo Line Input Gain Range:	-∞ to +20 dB
Stereo Line Input to Left/Right Balanced Output	+30 dB direct to L/R output - +40 dB via channel (max gain)

Frequency Response

Mic Input to Left/Right Output	20 Hz to 20 kHz 0 dB/-1 dB
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Total Harmonic Distortion & Noise

0.01% 20 Hz to 20 kHz Mic to Left/Right Output	(22 Hz to 22 kHz BW)
0.005% Mic Pre-amp	(22 Hz to 22 kHz BW)

Hum and Noise

Output	Residual Noise	S/N Ratio (Ref: +4dBu)	Test Conditions
Master Left/Right	-100 dBu	104 dB	Master Fader Down, Channel Levels Down
	-82 dBu	86 dB	Master Fader Nominal, Channel Levels Down
	-80 dBu	84 dB	Master Fader Nominal, Channel Faders Nominal, Panned Odd Channels (left), Even Channels (right)
Groups 1-4	-98 dBu	102 dB	Master Fader Down, Channel Levels Down
	-90 dBu	94 dB	Master Fader Nominal, Channel Levels Down
	-83 dBu	87 dB	Master Fader Nominal, Channel Faders Nominal Panned Odd Channels (left), Even Channels (right)
Aux 1-6	-101 dBu	105 dB	All controls off
	-81 dBu	85 dB	All channel sends nominal, masters nominal

(Hum and noise measurements: 22 Hz to 22 kHz BW)

16FX™, 24FX™ and 32FX™ Specifications

Equivalent Input Noise (EIN)

-129 dBu (Mic input terminated with 150 Ohms)

Crosstalk/Attenuation

Adjacent Input Channels (1 kHz) -70 dB typical

Mute Button Attenuation (1 kHz) -80 dB typical

Left to Right Outputs (1 kHz) -70 dB typical

Channel Fader Kill (1 kHz) -80 dB typical

Common Mode Rejection Ratio (Mic Input)

-50 dB minimum (20 Hz to 20 kHz)

-60 dB typical @ 1 kHz

Phantom Power

+48 volts

Signal/Clip Indicators

Yellow: -30 dBu

Red: 2 dB below clipping

Dimensions

16FX: 7.25" h x 19.0" w x 18.0" d on table top
16.7" wide without rack ears
(18.4cm x 48.3cm x 45.7cm on table top)
(42.4cm wide without rack ears)
10RU (17.44") x 19.0" x 7.25" in equipment rack;
6.75" behind rack
(44.3cm x 48.3cm x 18.4cm in equipment rack)
(17.1cm behind rack)

24FX: 7.75" high x 24.4" wide x 18.8" deep
(19.7cm x 61.9cm x 47.7cm)

32FX: 7.75" high x 32.5" wide x 18.8" deep
(19.7cm x 82.6cm x 47.7cm)



Installation Note, Ventilation:

This unit must have the following clearances from any combustible surface: top: 8", sides: 12", back: 12"

Weight

16FX: 22 lbs. (10.0 kg)

24FX: 25 lbs (11.4 kg)

32FX: 30 lbs. (30.0 kg)

Power Requirements

16FX dosmetic: 120 VAC 60 Hz 50 watts nominal

16FX export: 230 VAC 50/60 Hz 50 watts nominal

24FX: 100-240 VAC 50/60 Hz 60 watts nominal

32FX: 100-240 VAC 50/60 Hz 70 watts nominal

Test Conditions: 120 VAC 60 Hz maintained throughout testing

PEAVEY ELECTRONICS CORPORATION LIMITED WARRANTY

EFFECTIVE DATE: JULY 1, 1998

What This Warranty Covers

Your Peavey Warranty covers defects in material and workmanship in Peavey products purchased and serviced in the U.S.A. and Canada.

What This Warranty Does Not Cover

The Warranty does not cover: (1) damage caused by accident, misuse, abuse, improper installation or operation, rental, product modification or neglect; (2) damage occurring during shipment; (3) damage caused by repair or service performed by persons not authorized by Peavey; (4) products on which the serial number has been altered, defaced or removed; (5) products not purchased from an Authorized Peavey Dealer.

Who This Warranty Protects

This Warranty protects only the original retail purchaser of the product.

How Long This Warranty Lasts

The Warranty begins on the date of purchase by the original retail purchaser. The duration of the Warranty is as follows:

Product Category	Duration
Guitars/Basses, Amplifiers, Pre-Amplifiers, Mixers, Electronic Crossovers and Equalizers	2 years (+ 3 years)*
Drums	2 years (+ 1 year)*
Enclosures	3 years (+ 2 years)*
Digital Effect Devices and Keyboard and MIDI Controllers	1 year (+ 1 year)*
Microphones	2 years
Speaker Components (incl. speakers, baskets, drivers, diaphragm replacement kits and passive crossovers) and all Accessories	1 year
Tubes and Meters	90 days

[*Denotes additional warranty period applicable if optional Warranty Registration Card is completed and returned to Peavey by original retail purchaser within 90 days of purchase.]

What Peavey Will Do

We will repair or replace (at Peavey's discretion) products covered by warranty at no charge for labor or materials. If the product or component must be shipped to Peavey for warranty service, the consumer must pay initial shipping charges. If the repairs are covered by warranty, Peavey will pay the return shipping charges.

How To Get Warranty Service

- (1) Take the defective item and your sales receipt or other proof of date of purchase to your Authorized Peavey Dealer or Authorized Peavey Service Center.
- OR**
- (2) Ship the defective item, prepaid, to Peavey Electronics Corporation, International Service Center, 412 Highway 11 & 80 East, Meridian, MS 39301 or Peavey Canada Ltd., 95 Shields Court, Markham, Ontario, Canada L3R 9T5. Include a detailed description of the problem, together with a copy of your sales receipt or other proof of date of purchase as evidence of warranty coverage. Also provide a complete return address.

Limitation of Implied Warranties

ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Exclusions of Damages

PEAVEY'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCT, AT PEAVEY'S OPTION. IF WE ELECT TO REPLACE THE PRODUCT, THE REPLACEMENT MAY BE A RECONDITIONED UNIT. PEAVEY SHALL NOT BE LIABLE FOR DAMAGES BASED ON INCONVENIENCE, LOSS OF USE, LOST PROFITS, LOST SAVINGS, DAMAGE TO ANY OTHER EQUIPMENT OR OTHER ITEMS AT THE SITE OF USE, OR ANY OTHER DAMAGES WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If you have any questions about this warranty or service received or if you need assistance in locating an Authorized Service Center, please contact the Peavey International Service Center at (601) 483-5365 / Peavey Canada Ltd. at (905) 475-2578.

FEATURES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



Logo referenced in Directive 2002/96/EC Annex IV (OJ(L)37/38, 13.02.03 and defined in EN 50419: 2005)
The bar is the symbol for marking of new waste and is applied only to equipment manufactured after 13 August 2005



Features and specifications subject to change without notice.

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